

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPELLANT: Taniguchi et al. CONFIRM. NO.: 8149
SERIAL NO.: 10/717,985 GROUP NO.: 1733
FILING DATE: November 20, 2003 EXAMINER: Musser, Barbara J.
TITLE: THREE-DIMENSIONAL PANELS FOR A GAME BALL AND
RELATED METHODS

Mail Stop Appeal Brief-Patents
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APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41

Appellants hereby submit this Reply Brief under 37 C.F.R. § 41.41 in response to the Examiner's Answer dated July 11, 2007. Appellants respectfully submit that the Examiner's Answer does not overcome the deficiencies of the final Office action dated January 26, 2006. Accordingly, Appellants incorporate herein by reference all arguments presented in the Amended Brief on Appeal, filed April 24, 2007. In addition, Appellants submit the following remarks on the new matters and reasoning raised in the Examiner's Answer.

REMARKS

I. The Examiner is Mistaken in Stating That Claim 29 Lacks Antecedent Basis

In the July 11, 2007, Examiner's Answer, the Examiner alleges that "*claim 29's term 'outer layer' has no antecedent basis in claim 25.*"

Appellants respectfully traverse. Claim 25 specifically recites a method of manufacturing a game ball including the step of "*interconnecting the edges of the panels, thereby forming an outer layer of the ball surrounding the bladder.*" As such, the "*outer layer*" of claim 29 has clear antecedent basis in claim 25, and comprises the interconnected plurality of multi-layer panels "*surrounding the bladder.*"

Appellants respectfully submit that the Examiner is clearly mistaken in presuming that the "*outer layer*" of Appellants game ball, comprising a plurality of interconnected multi-layer panels, is equivalent to an "*outer surface*" of a single panel of a ball. As such, the Examiner is mistaken in interpreting a single panel of U.S. Application No. 6,206,795 to Ou (hereinafter "Ou") as teaching a plurality of interconnected panels, as recited in Appellants independent claim 25, and an outer layer comprising a self-supporting surface, as recited in Appellants dependent claim 29. The panels of Ou do not interconnect, but are rather separated by the wedge shaped ridges. The panels of Ou therefore cannot, by definition, form a self-supporting structure (*i.e.*, an outer layer of the ball comprising a plurality of interconnecting multi-layer panels, as recited in claim 29/25), at least because the panels of Ou do not even contact each other. Rather, the panels of Ou are supported only by the bladder and associated wedge shaped ridges, and without the bladder the panels do not support each other in any way.

As such, the Examiner's rejection fails to satisfy the requirements of 35 U.S.C. §102(b), at least because Ou does not teach or suggest every element of the invention as claimed.

II. The Examiner is Mistaken in Defining the Term “Interconnected”

In the July 11, 2007, Examiner’s Answer, the Examiner alleges that: “*Regarding appellant’s argument that claim 25 requires the edges of the panels to be interconnected, the claim does not require the panels to be contacting.*”

Appellants respectfully traverse. Appellants respectfully submit that in order to be “*interconnected*,” the edges of the panels must, by definition, be contacting. Support for this can be found in the specification as originally filed, and at least at paragraphs [0018], [0019], and [0026]. For example, paragraph [0026] states that: “*In other embodiments, the edges 32 of the panels 30 are interconnected, thereby forming an outer layer 33 surrounding the bladder 22 or the carcass 27. The outer layer 33 may or may not form a self-supporting structure.*” In addition, FIG. 2 of the application as filed clearly shows a plurality of panels (30) contacting, i.e. interconnected, at edges (32).

As such, Appellants respectfully submit that the term “*interconnected*,” as used and supported in the specification, clearly establishes that the edges of the plurality of panels are contacting.

In contrast, the panels of Ou do not interconnect, but are rather separated by the wedge shaped ridges. Appellants respectfully submit that the Examiner is, therefore, mistaken in presuming that the separate, unconnected, panels of Ou, are the same as Appellants interconnected, contacting panels.

III. The Examiner is Mistaken in Defining the Term “Dimensioned”

In the July 11, 2007, Examiner’s Answer, the Examiner alleges that: “*[r]egarding the limitation of the outer surface of the top layer being dimensioned to correspond to a section of the surface of the ball, the claim does not require the top layer to be curved to correspond to the curvature of a section of the ball, but rather dimensioned, i.e. of the same size..*”

Appellants respectfully traverse. Appellants submit that in order to be “*dimensioned to substantially correspond to a section of a surface of the ball*,” the top layer of the panel must, by definition, be curved to substantially correspond to a section of a surface of the ball. Support for this can be found in the specification as originally filed, and at least at paragraphs [0028] and [0051]. For example, paragraph [0028] states that:

Referring to FIG. 4, each panel 30 includes a top layer 40 and at least one backing layer 42 disposed underneath the top layer 40 to improve elastic properties and overall performance of the game ball. The outer surface 43 of the top layer 40 and the inner surface 68 of the backing layer 42 are dimensioned to substantially correspond to a section of a surface 45 of the bladder 22 or the carcass 27. Thus, for example, *the outer panel 30 may have a predetermined radius of curvature R_p substantially matching the radius R₀ (FIG. 3) of the uninflated ball 20*, when the outer panel 30 is in a substantially unloaded state. (Emphasis added)

In addition, FIG. 4 of the application as filed clearly shows a panel curved to substantially correspond to a section of a surface of the ball.

Appellants respectfully submit that the Examiner is mistaken in concluding that the use of the term “*dimensioned*” does not require the curving of the surface of the panel. In order to “*correspond to a section of a surface of a ball*,” as required by Appellants independent claims 1 and 25, the surface of a panel must, by definition, be curved, with the “*dimensioning*” of the panel relating to the radius of curvature, as described in paragraph [0028].

Appellants respectfully submit that a flat surface of a panel, no matter what “size” simply cannot “correspond” to a curved surface, such as a section of a surface of a ball, and the Examiner is clearly in error in concluding that a flat surfaced panel, such as the panel of Japanese Patent No. JP 1-265979 to Shishido et al. (hereinafter “JP 1-265979”), is the same as a curved panel “dimensioned” with a set radius of curvature, as recited in Appellants independent claims 1 and 25.

Accordingly, Appellants respectfully submit that the Examiner fails to satisfy the requirements of §102(b), at least because the cited art does not disclose each and every limitation of the claimed invention.

IV. The Examiner Relies on Mistaken Interpretations of the Prior Art

In the July 11, 2007, Examiner’s Answer, the Examiner alleges that, with respect to U.S. Application No. 6,206,795 to Ou (hereinafter “Ou”): *“The edges of the panels are inclined to provide a more three-dimensional appearance. The reference does not disclose this shaping is to prevent peeling of the panels from the ball.”*

Appellants respectfully traverse. Ou states, at column 1, line 58 to column 2, line 5, that:

However, if an additional foam layer is adhered to the conventional cover panel, another unsolvable problem appears, that is *the edges of the foam layers fail to rigidly adhere with the vertical sides of the ribs 111 of the bladder carcass 11* while the thickness of the ribs 111 is standardized.

Accordingly, it is a *main object* of the present invention to provide a basketball having a plurality of panel recesses thereon *specifically adapted for firmly affixing a plurality of cover panels* each of which comprising an additional foam layer attached to the conventional cover panel, so as to construct a basketball not only retaining the original characteristic of durable, hardness and toughness but also containing new characteristics of being easier to grip and having better rebounding feature. [Emphasis added]

Appellants respectfully submit that Ou does appear to address the problem wherein the edges of a panel fail to adhere to the surface of the ball. Ou appears to solve this problem, at least in part, by providing the edges of the recesses with wedge shaped ribs, wherein the ribs are “*wedge shaped having two inwardly inclined sides to form two extending inclined edges for each panel recess, so that each of the ribs has a slightly narrower root and a slightly wider top end.*” See Ou, column 2, lines 17-21. In effect, the edges of each panel are pressed down into the overhangs produced by the inclined edges to fill the area produced under each overhang and provide better adherence between the panel edge and the ribs, thus reducing the problem of the panel edges delaminating from the bladder. See Ou, column 4, lines 10-38.

As such, Appellants respectfully submit that Ou does, at least in part, disclose a ball that includes ribs that are shaped, at least in part, to prevent peeling of the panels from the ball. Appellants respectfully submit that the problem of panel edges peeling from the surface of a ball will only be of relevance when flat panels are deformed to cover a curved surface, with the resulting stressed panels attempting to return to their unstressed, flat configuration. By providing a panel formed as a convex three-dimensional panel, which directly conforms to the surface of the ball, substantially no additional internal stresses will be produced by the assembled ball that would cause the edges of the panels to delaminate from the surface of the ball. Appellants, therefore, submit that there is simply no need to provide a panel formed in the manner recited in the Appellants’ invention with the inclined ribs of Ou, as the three-dimensionally formed panels of the Appellants’ invention provide a different solution to the problem of delamination in and of themselves. Thus, by requiring inclined ribs, Ou appears to be addressing a problem that would simply not exist if Ou were using convex panels formed to correspond with the surface of the ball. As such, Ou appears to teach directly away from the use of such panels. Appellants,

therefore, respectfully submit that the Examiner's interpretation of Ou appears to directly contradict the teachings of Ou and would, in fact, render the teaching of Ou unnecessary.

As such, the Examiner relies on a mistaken interpretation of the art and, as such, the rejection fails to satisfy the requirements of 35 U.S.C. §102(b), at least because Ou does not teach or suggest every element of the invention as claimed.

V. **The Examiner Relies on Mistaken Interpretations of the Legal Standard for Obviousness**

The Examiner makes no attempt to find references stating, with specificity, facts or arguments to support the proposition that certain limitations of Appellants invention are “*well-known and conventional*.” Rather, In the July 11, 2007, Examiner’s Answer, the Examiner states that: “[o]ne in the art can infer limitations from a reference,” and that “*examiner sees no need to find a reference showing a well-known and conventional fact in the bonding art.*” [Emphasis added]

Appellants respectfully traverse. It is well settled that a rejection under 35 U.S.C. § 103(a) cannot be properly based on a conclusory assertion that, had the skilled artisan simply “followed the ‘common practice’ in the art, he or she would have developed the claimed invention.” In re Deminski, 796 F.2d 436, 443, 230 USPQ 313, 316 (Fed. Cir. 1986). Likewise, a mere assertion that the modifications of the prior art necessary to meet the claimed invention were separately known to one skilled in the art at the time the invention was made is insufficient to support a finding of obviousness. See, Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). In addition, a broad, conclusory statement that the combination would have been obvious based on knowledge generally available to a skilled artisan is insufficient to sustain a

finding of *prima facie* obviousness. See id. See also, Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985) (requiring that the Examiner “present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references”) (emphasis added). At a minimum, the Examiner must provide evidence that the legal determination of *prima facie* obviousness is “more probable than not.” MPEP § 2142.

Furthermore, it is well settled that “[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” See, MPEP § 2141. As further stated in that section, “[w]hen the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper.” Ex parte Skinner, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). In particular, “the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination.” In Re Sang Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (quoting In Re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998)) (emphasis added). “The examiner can satisfy the burden of showing obviousness of the combination ‘only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.’” In Re Sang Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (quoting In Re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)).

Furthermore, as stated in the USPTO’s memorandum of May 3, 2007, from Margaret A. Focarino, Deputy Commissioner for Patent Operations, to the Technology Center Directors, discussing the Supreme Court decision in *KSR Int’l Co., v. Teleflex, Inc.*, “the analysis

supporting a rejection under 35 U.S.C. § 103(a) should be made explicit, and that it was ‘important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements’ in the manner claimed.”

Finally, general conclusions concerning what is “basic knowledge” or “common sense” to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection. See MPEP §2144.03B. To the extent that the Examiner might be relying on her own knowledge, Appellants observe that deficiencies of the cited references cannot be remedied by conclusory statements based on “common knowledge.” See MPEP §2144.03; In Re Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002).

Appellants therefore respectfully submit that a prima facie case of obviousness has not been established, at least with respect to claims 20 and 21, because the Examiner does not state, with specificity, facts or arguments to support the proposition that certain limitations of the Appellants invention were “*well-known and conventional.*”

CONCLUSION

In view of the arguments above, Appellants respectfully submit that claims 1-5, 8-23, and 25-31 are patentable over the cited references. Appellants urge the Board of Patent Appeals and Interferences to reverse all of the Examiner's rejections as to all of the claims, and request allowance of claims 1-5, 8-23, and 25-31 in due course.

Appellants do not believe any fee is required for filing this Reply Brief. Should Appellants' belief be in error, the Commissioner and Director are hereby authorized to charge any fees that may be due to Appellants' undersigned counsel's deposit account number 07-1700, with reference to docket number ADI-097.

Respectfully submitted,

Date: September 11, 2007
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